

# **The Influence of Transformation Leadership on Knowledge Sharing Within a Project Team Studies the Mediation Role of Based on Team Atmosphere**

**Tingting Dai and Xu Ren**

Chinese Graduate School, Panyapiwat Institute of Management  
Corresponding Author, E-mail: beibei48301@163.com

\*\*\*\*\*

## **Abstracts**

The project team is one of the primary organizational forms in the process of enterprise operation. As the core of the project team, the team manager has a significant impact on the knowledge sharing behaviour within the project team. The primary purpose of this study is to make a mathematical and chemical analysis of transformational leadership behaviour and knowledge sharing behaviour in the project team. The team atmosphere is the primary intermediary variable in the specific research process, and the environmental dynamics is the regulatory variable. The leading group of this study is individuals with specific project teamwork experience and certain cultural levels, including managers at all levels of the project team, technical or specific employees of the project team and ordinary employees in the project team. In the research, three hundred sixty-three valid sample data were obtained through questionnaire distribution and recovery. This study mainly uses SPSS to analyze. With the support of leadership theory and motivation theory, the study assumes that transformational leadership positively impacts team atmosphere and knowledge sharing behaviour within the project team. The study also assumes that the team's atmosphere plays an intermediary role in this process, and the environmental dynamics play a regulatory role.

Based on the theoretical model analysis and hierarchical regression analysis, this study proves that transformational leadership positively impacts the support atmosphere, innovation atmosphere, and employee identity atmosphere in the team atmosphere. There is no significant relationship between vision incentive, personalized care and knowledge sharing in transformational leadership behaviour. However, there is a significant positive relationship between leadership charm and moral example and the behaviour of knowledge sharing. Project team atmosphere positively correlates with the impact of knowledge sharing within the project team. However, it plays a partial intermediary role between transformational leadership and knowledge sharing within the project team. Environmental dynamics partially regulates the relationship between transformational leadership and knowledge sharing within the team.

**Keywords:** The Influence of Transformation Leadership, Knowledge Sharing, Project Team Studies, The Mediation Role, Based on Team Atmosphere

---

\* Received: September 7, 2021; Revised: September 22, 2021; Accepted: September 23, 2021

## Introduction

The concept of transformational leadership was first put forward by Burns (1987). The early research on this concept mainly focused on the category of political leaders. It was not until the end of the last century that the concept of transformational leadership was gradually introduced into business management. Burns (1987 : 43), Downton (1973 : 86) and other researchers believe that the core of transformational leadership is to indicate that leaders and followers will influence and play a role on each other. If the relationship between leaders and followers gets closer, the whole collective will reflect higher moral concepts, value beliefs and work enthusiasm. Compared with other types of leaders, transformational leaders tend to trust and respect their members more. Transformational leaders can influence the ideas and behaviours of their followers to develop and improve their work skills. However, the research on transformational leadership is still in a relatively basic state, which is based on the research on transformational leadership by Burns (1987 : 65). and other foreign researchers have begun to conduct more in-depth analyses on the impact model of transformational leadership behaviour.

On the whole, domestic and foreign researchers' research on transformational leadership is still in a relatively primary stage. In contrast, the research on transformational leadership behaviour on knowledge sharing in the team is more limited. The vast majority of studies stay at the level of pure theory. The analysis of specific impact path and impact proportion is minimal, limiting the practical application of research conclusions to a great extent. In addition, different countries and regions have different business environments. The theoretical research on transformational leadership around the environment with Chinese characteristics is still in a shallow state, which is difficult to give appropriate guidance to improve leadership behaviour. With the influence of large-scale transformation and the upgrading of nationwide industry, knowledge is playing a more magnificent influence in the development of enterprises as the core competitiveness. Intellectual resources are of great significance to enhance the overall competitiveness of enterprises. The improvement of knowledge stock and quality could improve enterprises' dynamic ability. Furthermore, it help enterprises identify crises and opportunities internally. From the internal perspective, knowledge integration within the enterprise can promote innovation and reform and inspire long-term development.

Multiple enterprises in China apply to project-oriented organizations, particularly in the creative and development industries. The profits of enterprises principally depend on the implementation of independent projects. Some core projects could often lead to the future development of enterprises. Knowledge sharing is an inevitable result in the project team. The project team needs high-frequency knowledge sharing to improve and innovate the existing knowledge resources. Due to the temporary and instability of the organizational form of the project team, team knowledge management is complex, and team members' desire for knowledge sharing is usually faint. In this case, project managers need to constantly adjust the overall atmosphere within the team through their leadership charm and specific management means, positively impacting it, guiding members to be more willing to share knowledge, and promoting the smooth completion of project objectives. The primary relationship structure of "leadership behavior - team atmosphere - knowledge sharing behavior" is generally formed in this environment. In the environment of high-intensity competition, managers must constantly strengthen their project management ability to improve general competitiveness. Promote internal knowledge sharing is one of the valuable ways to strengthen knowledge behaviour and improve the overall profit behaviour of enterprises.

## Research Objectives

This paper mainly analyzes the specific impact of transformational leadership on knowledge-sharing behaviour within the project team. With the support of relevant theoretical research, this study sets the independent variable as transformational leadership behaviour. The primary measurement dimensions are a moral example, vision incentive, personalized care and leadership charm. The intermediary variable is the team atmosphere, the relevant measurement dimensions are innovation atmosphere, support atmosphere and employee identity atmosphere, and knowledge sharing is the dependent variable. The development of an enterprise is closely related to its external environment. In order to better adapt to the continuously changing external environment, managers cannot stick to the rules but need to adjust the overall strategy dynamically. Only by timely understanding the changes in the industry and making sound and easy decisions can we better ensure the efficient operation of the project team. With the continuous change of external policies, technical environment and rapid market change, enterprises will face more opportunities and dangers. In this case, the transformational leadership behaviour of managers will have a more critical impact on the development of the whole team. In order to better reflect the actual situation of team project operation, this paper adds environmental dynamics as the primary adjustment variable.

This study mainly uses the overall method of combining theoretical and empirical research, supplemented by qualitative and quantitative analysis. It comprehensively uses various research methods, such as literature research, induction and deduction, questionnaire survey, and statistical analysis. The research of this paper is mainly carried out according to the technical route of "raising problems, analyzing problems and solving problems". Firstly, the research started from the relevant theories of knowledge sharing and combined with the previous research results. It put forward the core problem of this study: what impact does transformational leadership have on knowledge sharing within the project team and whether the impact relationship can be effectively quantified. Secondly, by combining and integrating the research literature at home and abroad, this paper explores the current literature on transformational leadership and knowledge sharing. It establishes the exploration path with team atmosphere as the main starting point from the advantages and disadvantages of the existing literature. Through the analysis of leadership theory, team atmosphere related theory, social exchange theory and other theoretical research, this paper analyzes the types and characteristics of knowledge sharing within the project team, combined with the research on transformational leadership and team atmosphere, constructs the relationship model between various variables, puts forward the main assumptions, and prepares for the later empirical research. Based on the hypothesis, this paper takes the project team participants as the primary research object to carry out empirical analysis, collects the sample data in the form of the questionnaire, and focuses on the impact of transformational leadership and team atmosphere on knowledge sharing in the project team. Finally, the results of empirical research are analyzed and discussed.

## Research Methodology

This study mainly used the overall method of combining theory and empirical research and supplementing qualitative and quantitative analysis, including literature research, induction, questionnaire and statistical analysis.

### (1) Literature Research Method

Based on multiple knowledge resource platforms, we extensively collect information on transformative leadership, team atmosphere, knowledge sharing and other aspects. Through the comprehensive understanding and combing of domestic and foreign literature, we define the relevant concepts of the study and analyze the relationship between the variables to establish the basic assumptions and main research ideas of the study.

### (2) inductive deduction method

The inductive deduction is mainly applied in the process of hypothesis research. The author's previous human theory is the central hypothesis. Based on literature research and comparison, the author sorted relevant theories and views at home and abroad, combined with the particularity of the project team, and put forward and constructed the main theoretical framework and model of this study.

### (3) Questionnaire Method

This paper finds and designs relevant scales, issues questionnaires to participants and leaders of project teams, and collects data on transformational leaders, team atmosphere, team knowledge sharing, and environmental dynamics based on domestic and foreign literature.

### (4) statistical analysis method

The data in the research are mainly based on the questionnaire survey. After obtaining primary data resources, general screening; and software verifies the proposed theoretical assumptions and relational models. Through the descriptive analysis and effectiveness analysis of the data, difference analysis, difference analysis, variable correlation analysis and regression analysis, the empirical awakening conclusions are drawn reasonably and objectively to provide the basis for the presentation of more profound related suggestions.

### (5) Multilayer linear regression

Based on a large amount of data available in the study, the regression function between the dependent and independent variables. We are more consistent with the actual context by establishing a series of models related to transformative leadership, team atmosphere, knowledge sharing, and external environmental adjustment.

## Research Conceptual Framework

Based on the research of variable selection and topic setting, this research mainly referred to the TLQ measurement scale designed by Li Shuping, integrated the analysis and summary of leadership behavior by Yukl (2002 : 708-722), divided the behavior of reform leadership from their four levels of plan, goal, allocation and supervision, and put forward the following form:

**Table 1: The Transformational Leadership Measurement Scale**

Measurement variable	Measurement item
Transformative leadership behavior	Be able to set clear team goals and make long-term significance
	Care about the growth of team members and give support or advice
	Open-minded, have a certain sense of innovation
	Be an example for your employees

In the research of team atmosphere, we focused on sharing vision, participation security, the pursuit of excellence and innovation support, which was proposed by Anderson and West (1996: 53-66). the research of Jehn and Mannix (2001) combined the five indicators of trust, respect, cohesion and public discussion. We also drew on the dimension selection of Bock (2005: 41-46). The views proposed in the research finally control the investigation dimension of team atmosphere in the three dimensions, support atmosphere, innovation atmosphere and identity atmosphere, which are most closely related to knowledge sharing behaviour within the team.

**Table 2: Team atmosphere Measurement Scale**

Measurement variable	Measurement item
Team atmosphere	Teams will provide resources and opportunities for excellent ideas
	Team members can positively evaluate and discuss new ideas and ideas
	The realization of the team goals is very valuable to me

The internal team knowledge-sharing survey mainly refers to Johannsen and Hendrix (2008)'s research. The knowledge sharing behaviour is a one-dimensional variable. Comprehensively consider the actual situation of knowledge sharing behaviour in the project team, from aspects of knowledge sharing willingness, quality, set up the research participants, the central situation of the project team as the subject, to the knowledge sharing behaviour to make a relatively comprehensive survey of the team.

**Table 3: The Knowledge Sharing Behavioral Measurement Scale**

Measurement variable	Measurement item
Knowledge sharing	I would love to share my working methods and resources to my team colleagues
	I am able to obtain clear and effective information from the members
	Team members often have discussions and share about the work

Ge Yan and Yu Xiaozhong, and other researchers pointed that the environmental dynamic measurement scale mainly refers to the dimensional selection and control of the environmental dynamic. This research sets the scope of external environmental dynamics, the main dimensions of competitors, external policy adjustment, customer demand changes, and cooperative industry update. We also absorb Dess (2001) in the overall setting For policy-oriented thinking. Under the influence of China's social environment, policy orientation has essential significance for developing the industry. Good policy often means that the government and the tilt of social resources can effectively help the team in the industry, and also means that more funds and other teams enter this field. The competition will be more intense to some extent.

**Table 4: Environmental dynamic measurement scale**

Measurement variable	Measurement item
Environmental dynamics	Team competitors are changing rapidly
	The team's industry and customer needs are changing rapidly
	At present, the same type of team competition is relatively large
	Policies and regulations related to team projects are updated quickly

## Research Results

### Variable-correlation analysis

In this study, we used the Program for Research in Social Sciences tool to analyze the correlation for each variable while describing the relationship coefficient between the different variables based on the Pearson correlation coefficients. The transformational leadership behaviour involved in this study showed a significant correlation with the project team atmosphere, significant positive correlation, and knowledge sharing behaviour within the project team. Based on the overall data performance, the transformational leadership behaviour, project team atmosphere, and knowledge sharing behaviour in the main effect show a significant correlation between pairs, which meets the necessary conditions for regression analysis and can conduct a more in-depth analysis. At the same time, the results of the correlation analysis also show that transformative leadership behaviour has a significant positive impact on the team atmosphere and a significant positive impact on knowledge-sharing behaviour.

**Table 5: Variable correlation analysis**

	Transformative leadership behavior	Team atmosphere	Knowledge-sharing behavior
Transformative leadership behavior	1		
Team atmosphere	0.208**	1	
Knowledge-sharing behavior	0.238**	0.216**	1

**hypothesis test of mediation action**

According to the study of Kenny in 1986, ta variable A has an intermediary effect on variables B and C. firstly, we need to meet that variable B has a direct effect on A. secondly, Variable A has a direct effect on variable C. At last, variable B directly affects C. When these three prerequisites are met, it is necessary to confirm the intermediary effect by calculating the degree of path effect. In the context of this study, we wanted to verify that the project team atmosphere has a mediator between transformative leadership behaviour and project team knowledge sharing behaviour. First, it is necessary to prove that transformative leadership behaviour directly affects the project team atmosphere. Secondly, the project team atmosphere has a direct effect on knowledge sharing behaviour in the project team. The third, transformative leadership behaviour, directly affects knowledge sharing behaviour in the project team. These three prerequisites have been validated in model analysis in the previous text.

In this study, we conducted the basic test of the three dimensions of support atmosphere, innovation atmosphere and identity atmosphere in the project team atmosphere. After obtaining the primary data, the author again integrated the data through the theoretical model and obtained the corresponding data in the following table. Overall, the path "transformative leadership behaviour — team atmosphere — knowledge shared behaviour" is significant if both the a and b effects are significant. From the 95% BootCI coefficient, the 95% confidence intervals obtained from Bootstrap sampling calculations did not include 0, again validating the data's significance. In addition, the direct effect data are not significant, and the above analysis shows that the team atmosphere plays a fully intermediary role between transformative leadership behaviour and knowledge-sharing behaviour.

**Table 6: Summary of the mediation test results**

Item	c Total effect	a	b	a*b Medimediation effect	a*b(95% BootCI)	c' Direct effect	Test the conclusion
Transformative Leadership Behavior => Team The => knowledge-	0.776**	0.838**	0.226**	0.189	0.097 - 0.256	0.073	Complete intermediary

sharing behavior							
p<0.05** p<0.01							

Subsequently, the author performed more deeply on the team atmosphere, and the obtained data are shown in Table 8. When the team atmosphere is involved in the model, the correlation coefficient between transformational leadership behaviour and knowledge sharing behaviour shows obvious changes, which shows that the project team atmosphere plays an intermediary role in knowledge sharing behaviour. Overall, the project team atmosphere plays a complete intermediary role in transformative leadership behaviour and knowledge sharing.

**Table 7: Summary of the intermediary effect test results**

The Process		Model 1	Model 2	Model 3
Changshu		0.683**	0.549**	0.248*
Step2 Transformative leadership behavior		0.776**	0.845**	0.073**
Step2 Project team atmosphere				0.238** 0.277** 0.307**
	R <sup>2</sup>	0.576	0.623	0.801
	Adjust the R <sup>2</sup>	0.566	0.614	0.793
	The F value	54.204	66.013	114.721

### Regulation of the action analysis

In order to conduct a more extensive analysis of the regulatory effect of environmental dynamics, this research centralized team atmosphere and environmental dynamics at first, mainly to eliminate collinearity between variables and make the analysis more reliable. Using the hierarchical linear regression of the environment, we put the control variables, environmental dynamics, and interaction items in SPSS to test the regulatory effect of environmental dynamics and obtain the contents shown in Tables 9 and 10.

Table 8 The analysis of environmental dynamics is the results of sharing behavioral regulatory effects with knowledge			
	Model 1	Model 2	Model 3
Constant	3.290 **	3.369 **	3.323 **
You are at your age	-0.086	-0.017	-0.005
Your current cultural level is	0.021	0.006	0.017
Your years of work in the department is	0.066 *	0.019	0.012
Your position in this project team is	-0.007	-0.010	-0.0103
Leadership charm	0.764 **	0.291 **	0.132 **
Environmental dynamics		0.654 **	0.429 **

Leadership charm *			0.141 **
Environmental dynamics			
R <sup>2</sup>	0.632	0.830	0.932
Adjust the R <sup>2</sup>	0.626	0.827	0.928
The F value	F = 62.407	F = 89.458	F = 150.538
ΔR <sup>2</sup>	0.632	0.198	0.002
p<0.05 ** p<0.01			

Table 9 Results of the behavioral regulation effect of environmental dynamics on moral model and knowledge sharing

	Model 1	Model 2	Model 3

Table 9 Analysis of environmental dynamics			
Constant	3.082**	3.214**	3.192**3.124**
You are at your age	-0.016	-0.009	-0.007
Your current cultural level is	0.070	0.027	0.031
Your years of work in the department is	0.021*	0.003	0.003
Your position in this project team is	-0.016	-0.012	-0.012
Virtue is exemplary	0.658**	0.224**	0.220**
Environmental dynamics		0.663**	0.657**
Virtue model * environmental dynamics			0.025
R <sup>2</sup>	0.526	0.754	0.755
Adjust the R <sup>2</sup>	0.519	0.750	0.75
The F value	F = 71.548	F = 94.384	F = 80.830
ΔR <sup>2</sup>	0.526	0.228	0.005
p<0.05 ** p<0.01			

The following hypotheses are proposed in this study, summarized, sorted out, and verified in previous studies. This research summarizes the primary test results in Table 9. Model 1 in Table 9 indicates the influence of control variables and leadership charm on knowledge sharing behaviour. Model 2 adds leadership charm and environmental dynamics, and model 3 puts leadership charm, environmental dynamics, leadership charm \* environmental dynamics. As shown in Table 9, the leadership charm \* environmental dynamic interaction term has a significant impact on the willingness of knowledge transfer. Therefore, environmental dynamics play a significant regulatory role in the relationship between leadership charm and knowledge transfer. Similarly, model 1 in Table 10 shows the influence of control variables and virtue model on knowledge sharing behaviour, model 2 adds moral model and environmental dynamics, and model 3 puts virtue model, environmental dynamics and virtue model \* environmental dynamics. As shown in Table 10, the environmental dynamic interaction term is not significant on the willingness of knowledge transfer. Therefore, environmental dynamics is not significant in the relationship between moral model and knowledge transfer. To sum up, because the vision incentive dimension and personalized care

dimension have no impact on knowledge sharing behaviour, the dimension of environmental dynamics and leadership charm has a prominent regulatory role, but not with the moral model dimension, the regulatory role of environmental dynamics can be established.

## Discussion

In total, the following hypotheses are proposed in this study, which were summarized and sorted out and verified in previous studies. The author now summarizes the basic test results in Table 10.

**Table 10: Summary of the study predictions**

Suppose item	Test results
Suppose that the H1 transformative leadership behavior has positive effects on the team atmosphere	Through the
Suppose that H2 transformative leadership behavior has a positive impact with knowledge sharing	Partial pass
Suppose that the impact of the H3 team atmosphere on knowledge sharing within the project team is positively correlated	Through the
H4 assumes that H4 team atmosphere mediates between transformative leadership behavior and knowledge sharing within the project team	Through the
H5 environmental dynamics is assumed to play a regulatory role between transformational leadership behavior and knowledge sharing within the project team	Partial pass

From the hypothetical H1, based on the theoretical model analysis and hierarchical regression analysis results, the author proved that transformative leadership behaviour positively impacts the overall atmosphere of support, innovation, and employee identity atmosphere in the team atmosphere. Moreover, in the model, the research has further subdivided the dimension of transformational leadership behaviour. It has a more profound understanding of the relationship between transformational leadership behaviour and the project team atmosphere. Among the four dimensions, the identity atmosphere has the most positive influence. On the whole, the management behaviour of a single dimension can not perform well in all the atmosphere dimensions, and the management behaviour of different dimensions has a specific utility bias. Excellent transformational leaders need to master comprehensive management skills to effectively adjust and grasp the overall atmosphere of the project team.

Assuming H2 mainly demonstrates the close relationship between transformational leadership behaviour and knowledge sharing. However, the results show that transformative leadership behaviour closely connects to knowledge sharing behaviour in a team. This is closely related to the project team leaders on the team atmosphere. When the leader with higher moral quality infection of team members, team members will accept the change leader tolerance, efforts, dedication, and driven by the team positive dedication, knowledge sharing willingness is virtually enhanced.

This H3 assumption of a positive correlation between team atmosphere and knowledge sharing was verified within the data experiment. Sample data demonstrate that the project team atmosphere has a positive impact on knowledge sharing behaviour. The knowledge sharing line represents the process of individual independent knowledge circulating

through the team and transforming into collective knowledge. In the process of knowledge sharing, the sharing willingness of individuals becomes the key. In the support atmosphere, the resource tilt of innovative ideas and the help from colleagues all strengthen the identity of individuals in the project team and encourage individuals to carry out knowledge sharing behaviour in the team.

Assume H4 mainly on a mediating role between transformative leadership behaviour and knowledge sharing within the project team. Through the comprehensive application of regression typing and the comparison of F values of different simulations, the author finally proved that the team atmosphere plays a mediation role between the transformative leadership behaviour and the internal knowledge sharing of the project team.

Assume H5 believes that environmental dynamics positively regulates the relationship between transformational leadership and knowledge sharing within the team. The analysis model supported this prediction.

From the sample data and related analysis, the research results show that transformational leadership behaviour positively impacts team atmosphere. The dimensions of leadership charm and moral example of transformational leadership positively impact knowledge sharing within the team, and the other dimensions have no impact. Team atmosphere has a positive correlation with the impact of knowledge sharing within the project team. Moreover, Team atmosphere plays an intermediary role between transformational leadership behaviour and knowledge sharing within the project team. The last, Environmental dynamics partially regulates the relationship between transformational leadership and team knowledge sharing sub atmosphere.

There are some differences between the research conclusions and predictions. Considering the real workplace environment, individual differentiated cognition, and leadership behaviour complexity, the research conclusions are basically in line with people's research conclusions. However, there are some differences in specific performance. The transformational leadership behaviour of managers in the project team can have a positive impact on knowledge sharing behaviour. According to the data analysis in the author's research, the performance of transformational leaders in vision incentive, personalized care, moral example and leadership charm can effectively promote the construction of support atmosphere, innovation atmosphere and identity atmosphere in the project team. Under the mediation of team atmosphere, the comprehensive influence of transformational leadership behaviour has been guaranteed to a certain extent. Transformational project team managers have a high moral quality, can strictly demand themselves, and can make certain self-sacrifice for the interests of the collective. This kind of manager is positive and enterprising in thought, have high work enthusiasm, and can better drive the enthusiasm of the whole project team. At the same time, transformational leaders often have solid professional abilities and can better lead the team forward. Under the management of such leaders, the service style of the whole project team will also show a tendency of transformation, which can effectively promote the formation of a harmonious and positive team atmosphere. It also improves the collective cohesion of employees, forms a virtuous circle of mutual help and support, and better achieves the team's goals.

The project team atmosphere under transformational leadership behaviour will also have a positive impact on knowledge sharing behaviour. The behaviour of providing resources and opportunities for excellent ideas in the project team can effectively promote team members to contribute ideas actively and virtually from the exchange and sharing of ideas and knowledge. The support for new ideas and ideas in the project team will imperceptibly cultivate

employees' spirit of daring to think and speak, encourage employees to express their ideas and put forward their views actively, and contribute more ideas to the whole team's work. At the same time, in this environment, employees can also openly predict the place, effectively lubricate the relationship between employees and management, and achieve a good communication cycle from the superior to the superior. Under the continuous influence of the team atmosphere, employees will also slowly cultivate the team's sense of ownership, continuously enhance their sense of belonging in the team, and finally evolve into a selfless dedication to the organization, including contribution and sharing of personal knowledge.

From the survey data obtained in this paper, when the external environment changes sharply, the information exchange in the project team will be more active, and the frequency of knowledge sharing will naturally increase. The knowledge mastered by individuals in the project team is an essential part of the talent trading market. The instability of the external environment has stimulated individuals' desire for the stability of the existing team to a certain extent, and they are willing to contribute their knowledge resources actively. In addition, in a highly dynamic environment, transformational leaders can often perceive the drastic changes in the external environment in advance and actively take corresponding measures in the whole project team to ensure the final implementation of the project. Similarly, the change of the external environment has brought significant changes to the survival and development of the whole team. The team's core objectives focus on dealing with environmental changes and ensuring the survival of the team; the influence of the moral example of the transformational leader on the whole team cannot be strengthened and always maintain a stable level of influence. Transformational leadership pays attention to the cultivation of individual ability and personalized performance of project members. When encountering irresistible changes such as technology updates and policy adjustments, team members could also actively respond and strengthen the overall competitiveness of the team by contributing knowledge resources and other behaviours.

From the sample data and related analysis, the research results show that transformational leadership positively impacts the support, innovation, and employee identity in the team atmosphere. The dimensions of leadership charm and moral example of transformational leadership positively impact knowledge sharing within the team, and the other dimensions have no impact. Team atmosphere has a positive correlation with the impact of knowledge sharing within the project team. Team atmosphere plays an intermediary role between transformational leadership behaviour and knowledge sharing within the project team. Environmental dynamics partially regulates the relationship between transformational leadership and team knowledge sharing sub atmosphere.

## **Recommendation**

### **Pay attention to the selection and training of project team managers**

From the overall results, the transformative leaders can influence the knowledge sharing behaviour within the team under the intermediary role of the project team atmosphere. The noble character of the leader, the selfless dedication to the project team, and the role of individuals in the professional and technical example could encourage the individual knowledge sharing behaviour in the project team. It also promotes the transformation of personal knowledge into the collective knowledge and drives the project team's innovation and even the company.

From the perspective of enterprise knowledge management, improving the comprehensive quality of project managers could effectively drive the transformation of

enterprise knowledge and promote the active innovation of enterprises. The modern quality theory believes that the characteristics of leaders are gradually formed in practice, which can be shaped through training and cultivation. In this theory, successful leaders need to improve themselves through constant practice; similarly, managers with relatively weak management skills can improve through later training. Considering the urgent requirements of the external environment for the development of the enterprise, the enterprise managers should pay attention to the selection and training of the project team managers from the very beginning.

While actively exploring excellent managers who pay equal attention to business ability and personal quality, enterprise leaders also need to control the comprehensive quality of existing managers. Through training demand analysis and quality analysis, clear the project team needs in transformational leadership behavior, especially in moral model, leadership charm managers, and based on the relevant professional theory to determine the training plan, and through case teaching, ideological and moral training, leadership course and other training and practice, shape the management of transformative leadership behavior, improve the leader thinking mode, help project team leaders better manage the project team members in the actual work process.

#### **Pay attention to the influence of the team atmosphere**

Under the intermediary role of the team atmosphere, the transformative leadership behaviour can bring great help to the knowledge sharing behaviour within the project team, effectively promote the transformation of knowledge within the project team, and finally form the unique competitiveness of the project team. Based on this fact, senior enterprise leaders need to emphasize the association between leadership behaviour and team atmosphere when promoting transformational leadership behaviour. They should treat the improvement of team atmosphere as a strategic corporate goal. They need to start to instil the essence of implementing transformational leadership behaviour level by layer from the top level.

To be more specific, transformative leadership behaviour requires managers to improve their organization and leadership ability. Constantly enrich and improve the leadership theoretical knowledge, impress and influence the employees with their leadership charm, so that the employees can wholeheartedly follow the leaders, obey the leaders, and are willing to follow the leaders to complete the organizational goals. Managers must observe and analyze their subordinate characteristics, adopt different leadership methods from person to person, provide customized care and help, and enhance their psychological sense of belonging to the organization. Implementing these behaviours can not be straightforward for employees but requires managers to exert their leadership ideas to control the project team atmosphere and have an imperceptible influence on employee behaviour through the team atmosphere. In the specific leadership behaviour practice, assertive leadership behaviour will often stimulate the rebellious psychology of employees, but the behaviour implication generated through the team atmosphere will stimulate their autonomy.

#### **Actively adjust the employee mentality according to the changes in the external environment**

##### **The experimental**

results of this study show that external environmental dynamics can exert a positive regulatory effect on transformative leadership behaviour and the knowledge sharing of team members, especially in terms of leadership charm display. The leader of the project team needs to have specific practical skills and professional achievements. In this way, detailed guidance can be given when the team members discuss or deviate and finally make decisions to truly help share the musical knowledge within the project team into the actual project output.

Especially in a highly dynamic environment, the professional quality of leaders can better drive the improvement of the team atmosphere. Team managers need to comprehensively consider the psychological changes caused by employees due to the external environment when implementing transformational leadership. Moreover, managers should inject personal expertise and personal leadership into the whole team to give team members better confidence and jointly deal with the changes in the external environment.

In this case, the improvement of the team management system can better implement leaders' will and show the personal charm of leaders. Leaders could take external environment change as an opportunity to establish a perfect appraisal mechanism. Using material incentive and spiritual encouragement measures stimulate team members' enthusiasm and work enthusiasm, at the same time to encourage team members to be constantly aggressive, pursue progress, enhance their subjective initiative of knowledge learning, knowledge sharing. On the other hand, leaders also need to arrange specific pressure relief training and lectures and provide channels for team members to relieve pressure, such as organizing basketball games and theme parties such as sports and entertainment activities, to relieve the psychological pressure of team members many aspects.

## Reference

Downton, J.V. (1973). *Rebel leadership: Commitment and charisma in the revolutionary process*. Free Press.

Burns, J. M. (1987). *Presidential Government: The Crucible of Leadership*. Front Cover. Avon Books,

Podsakoff, O., & Scott, B.M. (1990). Organizational Citizenship Behavior: Its Nature, Antecedents, and Consequences. Thousand Oaks.

Anderson, N., & West, M.A. (1996). The Team Climate Inventory: Development of the TCI and Its Applications in Teambuilding for Innovativeness. *European Journal of Work & Organizational Psychology*, 5 (1), 53-66.

West, M.A., & Anderson, N.R. (1996). Innovation in top management teams. *Journal of Applied Psychology*, 81 (6), 680-693.

Van, B.W. (2002). Supervisory behavior, reciprocity and subordinate absenteeism. *Leadership & Organization Development Journal*, 23 (2), 84-92.

Yukl, G. (2008). How Leaders Influence Organizational Effectiveness. *The Leadership Quarterly*, 19 (6), 708-722.

Bock, G.W., & Zmud, R.W. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 7 (3), 41-46.